



SUMMARY OF RESEARCH

# Summary of Research: Efficacy of Trastuzumab Deruxtecan in HER2-Expressing Solid Tumors by Enrollment HER2 IHC Status: Post Hoc Analysis of DESTINY-PanTumor02

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## ABSTRACT

Summary of the original article, ‘Efficacy of Trastuzumab Deruxtecan in HER2-Expressing Solid Tumors by Enrollment HER2 IHC Status: Post Hoc Analysis of DESTINY-PanTumor02’. Trastuzumab deruxtecan (T-DXd) is an antibody-drug conjugate, which is a chemotherapy with a linker (deruxtecan) joined to an antibody (trastuzumab). Trastuzumab binds to the human epidermal growth factor receptor 2 (HER2) protein on cancer cells, where it releases the chemotherapy to kill these cells. The DESTINY-PanTumor02 clinical study tested the effectiveness of T-DXd for people with various HER2-expressing cancers and the safety of treatment. Previous results from DESTINY-PanTumor02 showed that T-DXd had anti-tumor activity, and the greatest effects were seen in people with the highest tumor level of HER2 [defined as immunohistochemistry (IHC) 3+]. In this previous analysis, the HER2 expression was measured at a central laboratory. In clinical practice, HER2 expression will likely be measured at a local laboratory, so understanding whether T-DXd has similar effects regardless of how HER2 expression is measured is important. Here, we looked at the effects of T-DXd based on the HER2 test result used to determine a person’s eligibility for the

study, which could be measured using a local or central laboratory. In people with IHC 3+ tumors (where HER2 was measured at a local or central laboratory), 51% had a decrease in the size or number of tumors, according to established criteria (referred to as an objective response), while, in people with IHC 2+ tumors, 26% had an objective response. Side effects with T-DXd were consistent with previous studies. These results confirm T-DXd has antitumor effects in HER2-expressing cancers where the HER2 expression is measured by a local or central laboratory.

**Keywords:** Advanced/metastatic solid tumors; Trastuzumab deruxtecan; HER2-expressing; HER2 testing

## SUMMARY OF RESEARCH

This is a summary of the original article ‘Efficacy of Trastuzumab Deruxtecan in HER2-Expressing Solid Tumors by Enrollment HER2 IHC Status: Post Hoc Analysis of DESTINY-PanTumor02’ [1] (Fig. 1).

Extended author information available on the last page of the article

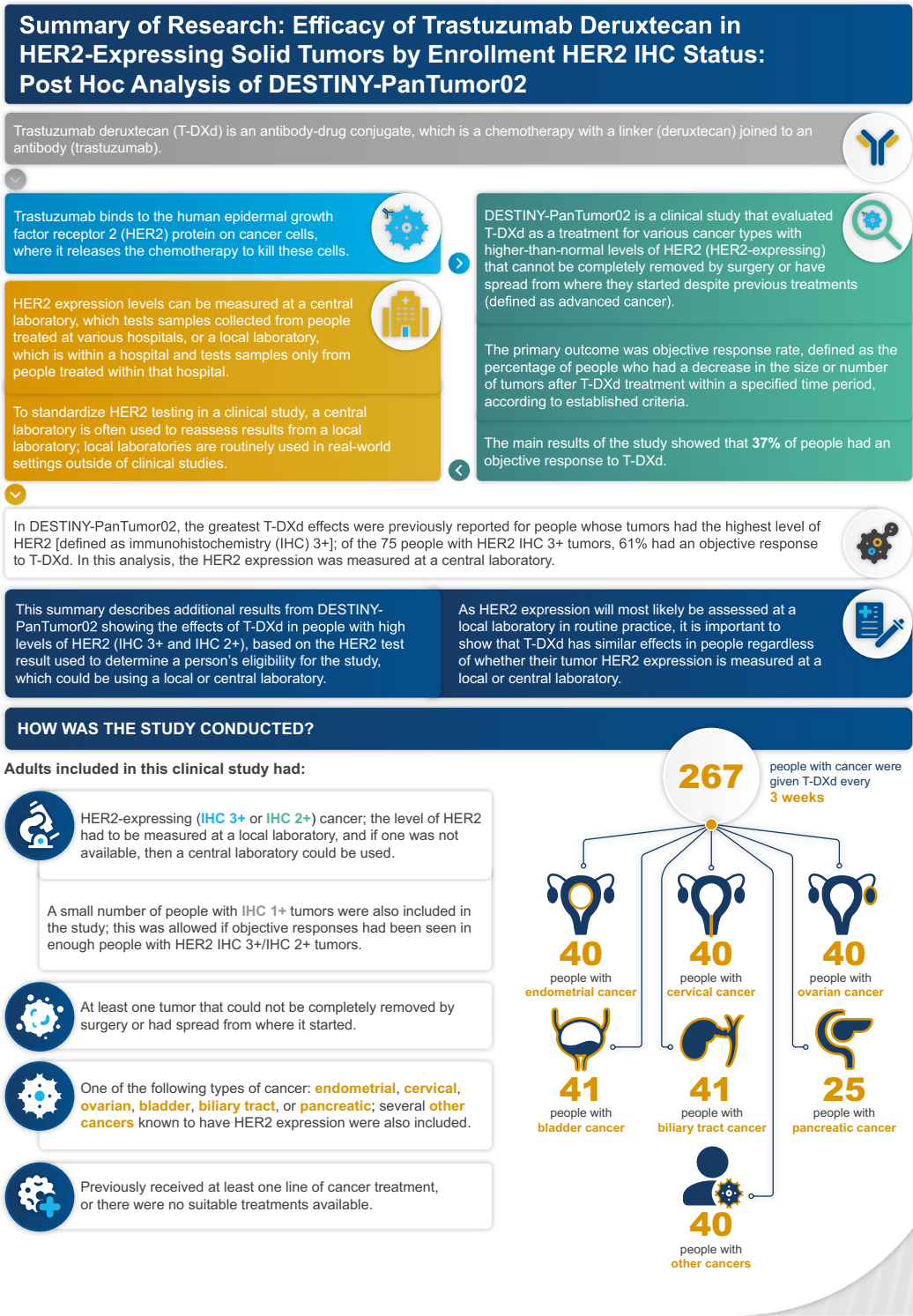
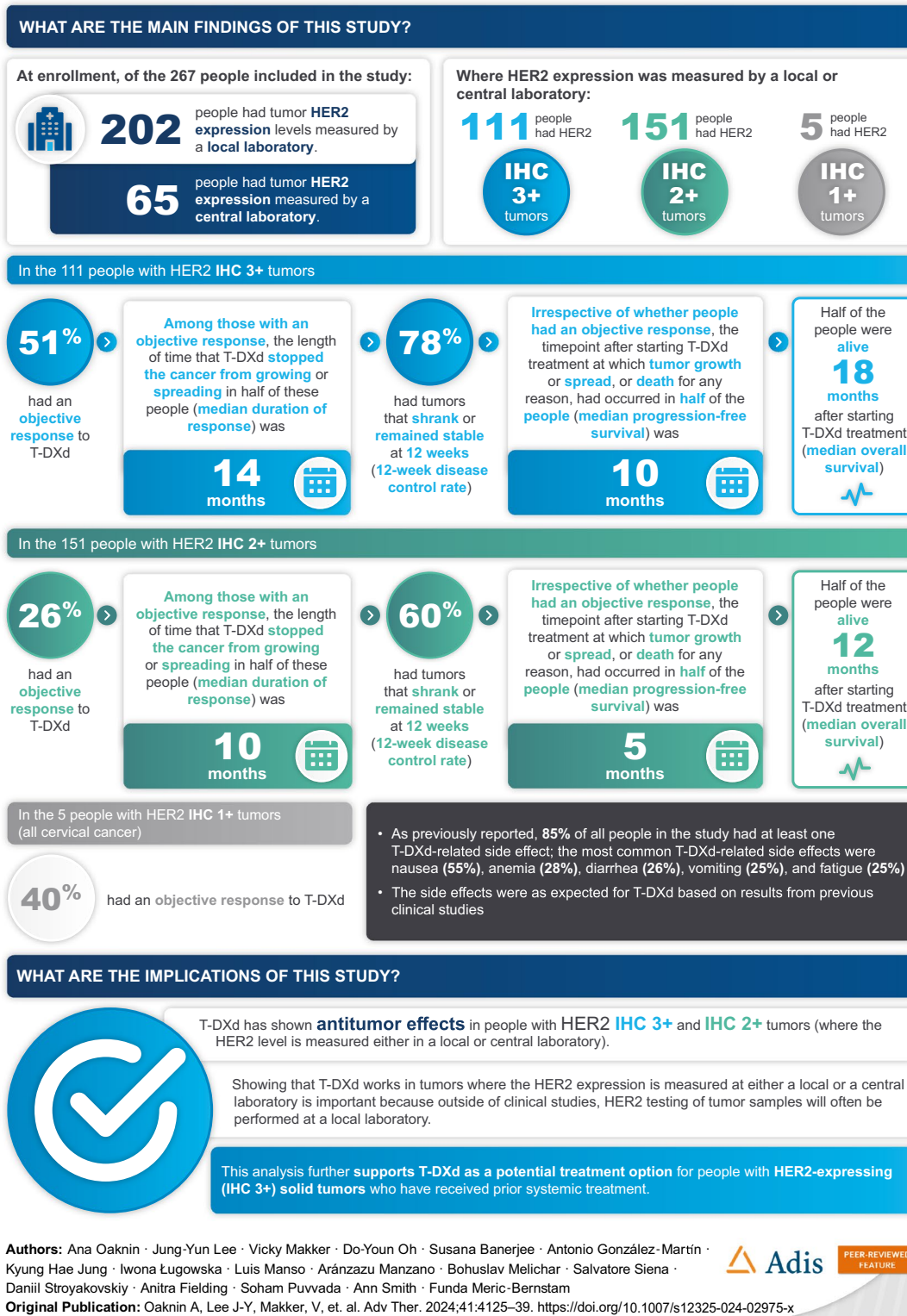


Fig. 1 Efficacy of Trastuzumab Deruxtecan in HER2-Expressing Solid Tumors by Enrollment HER2 IHC Status: Post Hoc Analysis of DESTINY-PanTumor02



**51%**

had an **objective response** to T-DXd

Among those with an **objective response**, the length of time that T-DXd **stopped the cancer from growing or spreading** in half of these people (**median duration of response**) was

**14** months



**78%**

had tumors that **shrank or remained stable** at 12 weeks (**12-week disease control rate**)

Irrespective of whether people had an **objective response**, the timepoint after starting T-DXd treatment at which **tumor growth or spread, or death** for any reason, had occurred in **half of the people** (**median progression-free survival**) was

**10** months



Half of the people were **alive** **18** months after starting T-DXd treatment (**median overall survival**)



**26%**

had an **objective response** to T-DXd

Among those with an **objective response**, the length of time that T-DXd **stopped the cancer from growing or spreading** in half of these people (**median duration of response**) was

**10** months



**60%**

had tumors that **shrank or remained stable** at 12 weeks (**12-week disease control rate**)

Irrespective of whether people had an **objective response**, the timepoint after starting T-DXd treatment at which **tumor growth or spread, or death** for any reason, had occurred in **half of the people** (**median progression-free survival**) was

**5** months



Half of the people were **alive** **12** months after starting T-DXd treatment (**median overall survival**)



In the 5 people with HER2 IHC 1+ tumors (all cervical cancer)

**40%** had an objective response to T-DXd

- As previously reported, **85%** of all people in the study had at least one T-DXd-related side effect; the most common T-DXd-related side effects were nausea (**55%**), anemia (**28%**), diarrhea (**26%**), vomiting (**25%**), and fatigue (**25%**)
- The side effects were as expected for T-DXd based on results from previous clinical studies



T-DXd has shown **antitumor effects** in people with HER2 **IHC 3+** and **IHC 2+** tumors (where the HER2 level is measured either in a local or central laboratory).

Showing that T-DXd works in tumors where the HER2 expression is measured at either a local or a central laboratory is important because outside of clinical studies, HER2 testing of tumor samples will often be performed at a local laboratory.

This analysis further **supports T-DXd as a potential treatment option** for people with **HER2-expressing (IHC 3+) solid tumors** who have received prior systemic treatment.

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PEER-REVIEWED FEATURE

Fig. 1 continued

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## Declarations

**Conflict of Interest.** Please see original article for full author disclosures.

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## REFERENCE

1. Oaknin A, Lee J-Y, Makker V, et al. Efficacy of trastuzumab deruxtecan in HER2-expressing solid tumors by enrollment HER2 IHC status: post hoc analysis of DESTINY-PanTumor02. *Adv Ther.* 2024;41:4125–39. <https://doi.org/10.1007/s12325-024-02975-x>.

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